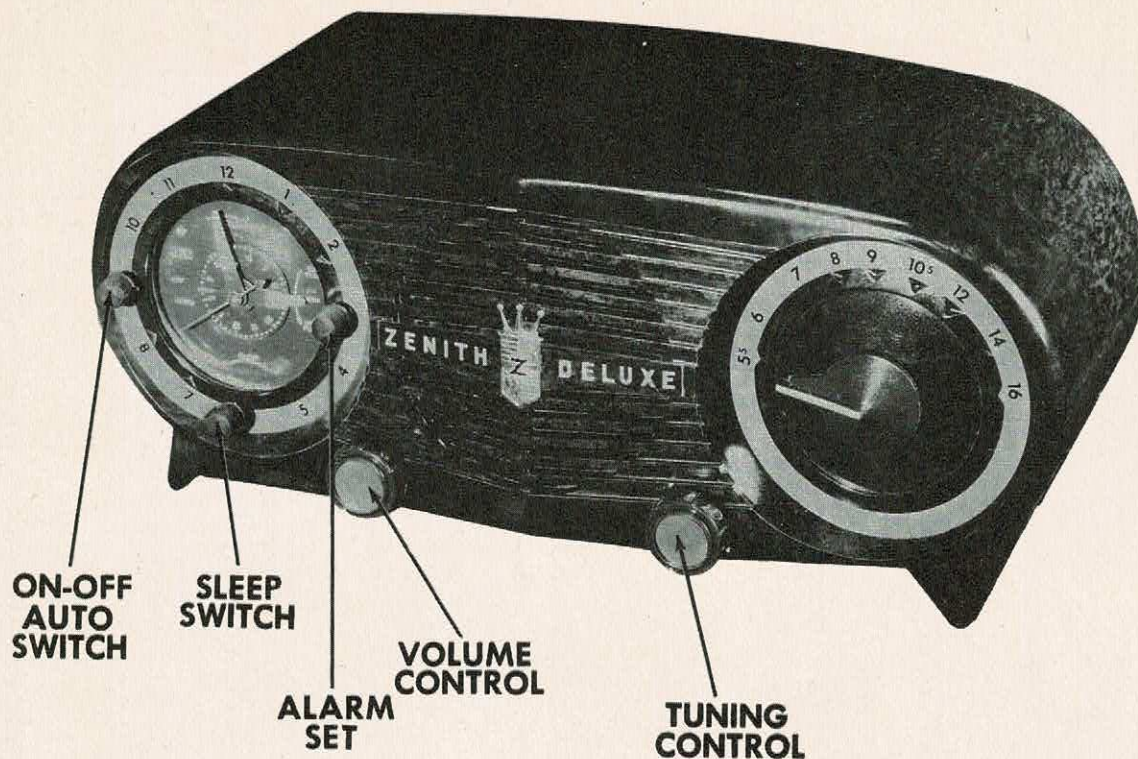




ZENITH
MODELS L518, F, G, W, Y (Ch. 5L03)



ZENITH
MODELS L518, F, G, W, Y (Ch. 5L03)

| | | | | | | |
|---|---|----------------------------|--------------------------------|-------------------|----------------|--|
| TRADE NAME | Zenith Model L518, F, G, W, Y (Ch. 5L03) | | | | | |
| MANUFACTURER | Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill. | | | | | |
| TYPE SET | AC Operated AM Superheterodyne Receiver with Electric Clock | | | | | |
| TUBES (Five) | Types 12BE6 Conv., 12BA6 IF Amp., 12AT6 Det.-AVC-AF Amp., 50C5 Audio Output, 35W4 Rectifier | | | | | |
| POWER SUPPLY 110-120 Volts AC-60 Cycles | | | RATING .28 Amp. @ 117 Volts AC | | | |
| TUNING RANGE—BROADCAST 535-1620 KC | | | | | | |
| ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT | | | | | | |
| Use isolation transformer, if available. If not, connect a .1MFD capacitor in series with low side of signal generator and B-. Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting. | | | | | | |
| Loop should be maintained in same relative position to chassis as when receiver is in cabinet. | | | | | | |
| DUMMY ANTENNA | SIGNAL GENERATOR COUPLING | SIGNAL GENERATOR FREQUENCY | RADIO DIAL SETTING | OUTPUT METER | ADJUST | REMARKS |
| .1MFD | High side to pin 1 (grid) of 12BE6 (V1). Low side to B-. | 455KC (400%Mod) | 600KC | Across voice coil | A1, A2, A3, A4 | Adjust for maximum output. If isolation transformer is not used, reduce dummy antenna to .001MFD to reduce hum modulation. |
| | Loop | 1620KC | Tuning gang fully open | " | A5 | Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output |
| | " | 1400KC | Tune to 1400KC signal | " | A6 | " |
| To set pointer turn tuning gang fully closed and set pointer parallel to base of cabinet of low frequency end of the dial. | | | | | | |

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PARTS LIST AND DESCRIPTIONS

ZENITH
MODEL L58 (Ch. 5L03)

CHASSIS—TOP VIEW

TUBES (SYLVANIA, GENERAL ELECTRIC or Equivalent)

| ITEM No. | USE | REPLACEMENT DATA | | NOTES |
|----------|------------------|------------------|----------------------|-------|
| | | ZENITH PART No. | STANDARD REPLACEMENT | |
| V1 | Converter | 12BE6 | 12BE6 | |
| V2 | IF Amplifier | 12BA6 | 12BA6 | |
| V3 | Det.-AFC-AF Amp. | 12AT6 | 12AT6 | |
| V4 | Audio Output | 50C5 | 50C5 | |
| V5 | Rectifier | 35W4 | 35W4 | |

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

| ITEM No. | RATING CAP. | VOLT | REPLACEMENT DATA | | | | | NOTES |
|----------|-------------|------|------------------|------------------|--------------------|---------------------------|------------------|-------|
| | | | ZENITH PART No. | AEROVOX PART No. | CENTRALAB PART No. | CORNEILL DUBLIER PART No. | SPRAGUE PART No. | |
| C1A | 80 | 150 | 22-2351 | AF12-19 | BO18 | | TVL-2442 | |
| C1B | 40 | 150 | 22-829 | P288-05 | DF-503 | PTE455 | 2TM-S5 | |
| C2 | .05 | 200 | 22-1666 | S1250 | D6-251 | UC-5325 | 5GA-T25 | |
| C3 | .250 | 200 | 22-829 | P288-05 | DF-503 | PTE455 | 2TM-S5 | |
| C4 | .05 | 200 | 22-829 | BPD-01 | D6-103 | TM581 | 5HK-S1 | |
| C5 | 10000 | 470 | 22-6 | BPD-00047 | D6-471 | UC-5347 | 5GA-T47 | |
| C6 | 470 | 400 | 22-3 | BPD-01 | D6-103 | TM581 | 5HK-S1 | |
| C7 | 10000 | 400 | 22-1182 | P488-01 | D6-103 | PTE451 | 4TM-S1 | |
| C8 | .01 | 400 | 22-3 | BPD-01 | D6-103 | TM581 | 5HK-S1 | |
| C9 | 10000 | 200 | 22-829 | P288-05 | | PTE455 | 2TM-S5 | |
| C10 | .05 | 200 | | | | | | |

CONTROLS

| ITEM No. | RATING RESISTANCE | WATTS | REPLACEMENT DATA | | | INSTALLATION NOTES |
|----------|-------------------|-------|------------------|--------------|--------------------|----------------------|
| | | | ZENITH PART No. | IRC PART No. | CENTRALAB PART No. | |
| R1A | 500K Ω | 1/2 | 63-2393 | Q11-133 | AG-58-S | Volume Attach to R1A |
| B | Shatt | | Not Req. | Not Req. | KSS-3 | |

RESISTORS

| ITEM No. | RATING OHMS | WATT | REPLACEMENT DATA | | NOTES |
|----------|---------------|------|------------------|--------------|-------|
| | | | ZENITH PART No. | IRC PART No. | |
| R2 | 22K Ω | 1/2 | 63-1842 | BTS-22K | |
| R3 | 2.2Meg | 1/2 | 63-1826 | BTS-2.2Meg | |
| R4 | 68 Ω | 1/2 | 63-1737 | BTS-68 | |
| R5 | 4.7Meg | 1/2 | 63-1940 | BTS-4.7Meg | |
| R6 | 470K Ω | 1/2 | 63-1888 | BTS-470K | |

TRANSFORMER (AUDIO OUTPUT)

| ITEM No. | RATING | | | REPLACEMENT DATA | | | NOTES |
|----------|----------------|--------------|-------------------------------|------------------|------------------|----------------|--------------------------------|
| | IMPEDANCE PRL. | SEC. | DC RES. | ZENITH PART No. | STANCOR PART No. | TRIAD PART No. | |
| T1 | 2.6K Ω | 3.3 Ω | 193 Ω tap @ 6 Ω | 95-1293 | A-3849 | S-IX | ① Drill one new mounting hole. |

PARTS LIST AND DESCRIPTIONS (Continued)

SPEAKER

| ITEM No. | RATINGS | | | REPLACEMENT DATA | | | NOTES |
|----------|---------|-------|------------|------------------|------------------|---------------|-------|
| | SIZE | FIELD | V. C. IMP. | ZENITH PART No. | JENSEN PART No. | QUAM PART No. | |
| SP1 | 4" | PM | 3.3Ω | 48-713 | ST-113 Mod. P4-X | 4A07 | |

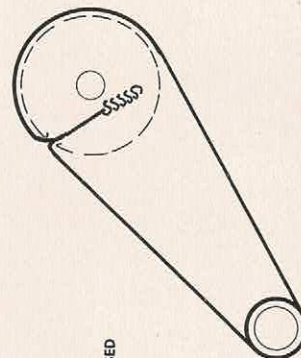
COILS (RF-IF)

| ITEM No. | USE | DC RES. | | ZENITH PART No. | REPLACEMENT DATA | | NOTES |
|----------|-----------|---------|------|-----------------|-------------------|-----------------|-----------------------|
| | | PRI. | SEC. | | MEISSNER PART No. | MILLER PART No. | |
| L1 | Loop Ant. | 3.1Ω | | S-20142 | | | |
| L2 | Osc. Coil | .7Ω | 6.5Ω | S-18816 | | | |
| L3 | Input IF | 18Ω | 18Ω | 95-1101 | 16-6666 | BC-368 | |
| L4 | Output IF | 17Ω | 17Ω | 95-1102 | 16-6770 † | BC-355 | Includes cabinet back |

* Disregard tap on secondary winding.
† Use adaptor plate and cut out center spadebolt mounting support.

MISCELLANEOUS

| ITEM No. | PART NAME | ZENITH PART No. | NOTES |
|----------|------------------|-----------------|--|
| M1 | Tuning Capacitor | 22-2386 | |
| M2 | Switch | 85-495 | 34-457MMF, 27-195MMF |
| | Clock Assy. | S-18829 | Radio-Phono Selector |
| | Clock Cover | S-18534 | Model L518 |
| | Clock Dial Glass | S-18825 | Models L518F, L518G, L518W, L518Y |
| | Clock Escutcheon | 192-145 | |
| | Cabinet | 57-1782 | |
| | Cabinet | 14-1454 | Model L518 |
| | Cabinet | 14-1455 | Model L518F |
| | Cabinet | 14-1503 | Model L518G |
| | Cabinet | 14-1453 | Model L518W |
| | Cabinet | 14-1451 | Model L518Y |
| | Dial Scale | 28-466 | |
| | Pointer | 58-267 | Model L518 |
| | Pointer | 59-265 | Models L518F, L518G, L518W, L518Y |
| | Knob | 46-904 | Clock (3 used), Model L518 |
| | Knob | 46-905 | Clock (3 used), Models L518F, L518G, L518W, L518Y |
| | Knob | 46-943 | Volume, Tuning (2 used), Model L518 |
| | Knob | 46-941 | Volume, Tuning (2 used), Models L518F, L518G, L518W, L518Y |

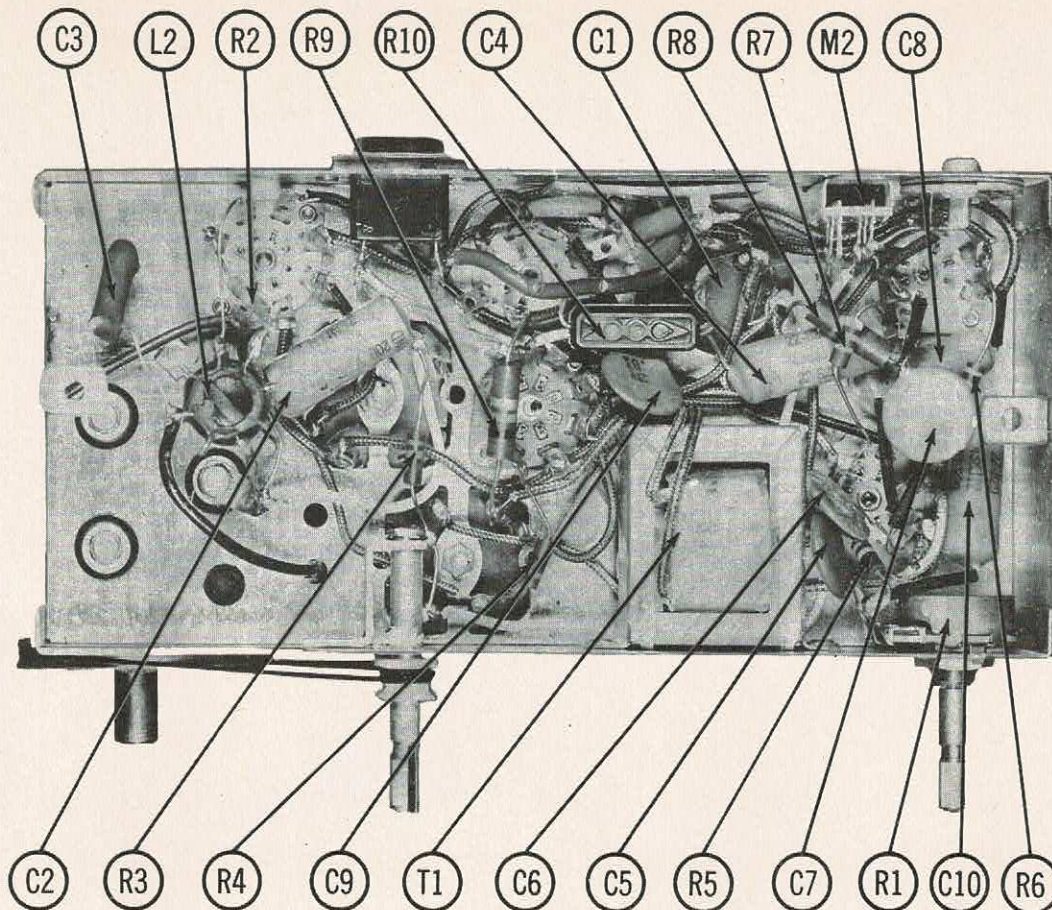


TUNING GANG FULLY CLOSED

2 1/2 TURNS

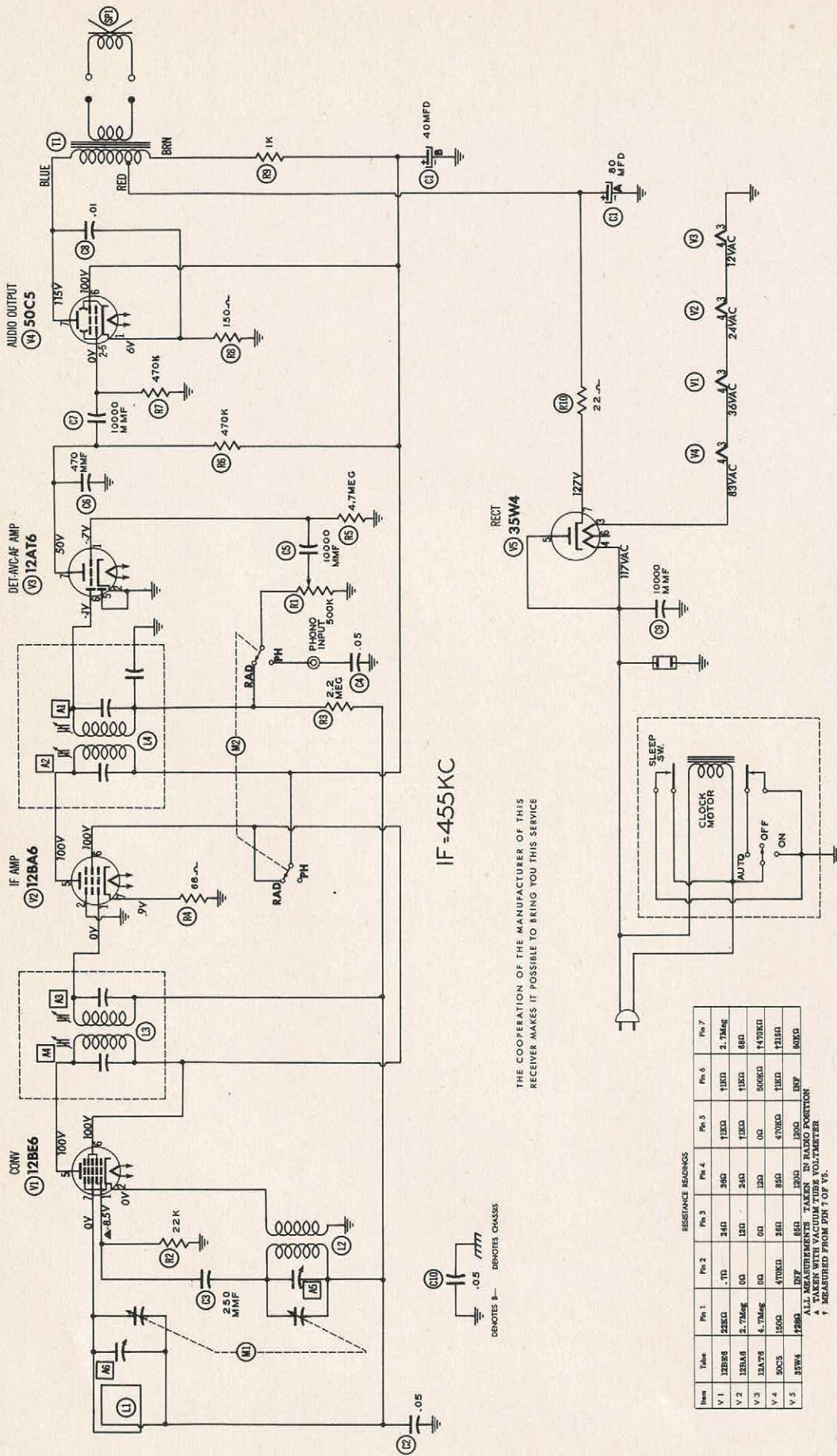
DIAL CORD DRIVE

CHASSIS—BOTTOM VIEW



ZENITH
MODEL L518 (Ch. 5L03)

ZENITH
MODEL L518 (Ch. 5L03)



1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1,000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of $\pm 10\%$ in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.